



PATENT
L1060

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Thomas Lyon
Serial No.: 10/651,327
Filed: August 28, 2003
For: INSERT FOR STEEL PLATES
Art Unit: 7679
Examiner: Neill R. Wilson

DECLARATION UNDER 37 C.F.R. 1.132

I, the undersigned, Thomas Lyon, a United States Citizen, residing at 23848 Oak Meadow drive, Ramona, California 92065, declare and say:

I began employment at Trench Plate Rental Company on February 11, 1985.

I have been engaged in the research and development of Inserts for Steel Plates since July 2001.

Screws, bolts, threaded rod and nuts having coil threads are a commercially available product. My employer, Trench Plate Rental Company, has purchased threaded rod and nuts having coil threads from Cordova Bolt of Buena Park, California.

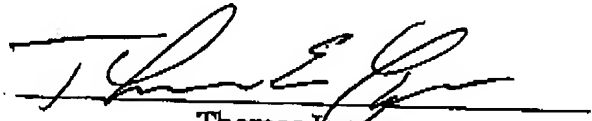
Tooling for Coil threads are commercially available from Western Tap Manufacturing, also of Buena Park, California. A product brochure of Western Tap

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Manufacturing Company, Inc. is attached to my Declaration as Exhibit A. It sets forth that coil thread taps that are available for sale by Western Tap Manufacturing Company and it also contains the engineering specifications for coil threads for nuts and screws.

I declare, under penalty of perjury, that the foregoing is true and correct.

Dated on August 20, 2004 at Escondido, California.



Thomas Lyon

Tuesday, June 29, 2004 12:20 PM

To: Tom Lyons

From: Rob McPherson,

(714) 228-0882

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WESTERN TAP MFG. CO., INC.

6870 ORAN CIRCLE - BUENA PARK, CALIFORNIA 90621-3374

(714) 521-1530 * (800) 253-8277 * FAX (800) 760-7440

COIL THREAD TAPS

PRICES APPLY FOR STRAIGHT FLUTE, RIGHT OR LEFT HAND, ON HAND TAP BLANKS

| SIZE | TPI | OAL | QUANTITY PRICE PER TAP | | | | | |
|--------|-------|----------|------------------------|----------|----------|----------|----------|----------|
| | | | THREAD | 1 | 2 | 3-5 | 6-11 | 12 |
| 3/8 | 7 | 2 15/16" | 1 1/4" | \$110.00 | \$90.00 | \$70.00 | \$65.00 | \$60.00 |
| 1/2 | 6 | 3 3/8" | 1 21/32" | \$115.00 | \$95.00 | \$80.00 | \$75.00 | \$70.00 |
| 5/8 | 4 1/2 | 3 13/16" | 1 13/16" | \$125.00 | \$105.00 | \$90.00 | \$85.00 | \$80.00 |
| 3/4 | 4 1/2 | 4 1/4" | 2" | \$140.00 | \$120.00 | \$110.00 | \$105.00 | \$100.00 |
| 3/4 | 4 1/2 | 6" | 3" | \$170.00 | \$140.00 | \$130.00 | \$125.00 | \$120.00 |
| 7/8 | 4 1/2 | 4 11/16" | 2 7/32" | \$180.00 | \$160.00 | \$150.00 | \$140.00 | \$125.00 |
| 1" | 3 1/2 | 5 1/8" | 2 1/2" | \$185.00 | \$170.00 | \$160.00 | \$150.00 | \$130.00 |
| 1 1/4" | 3 1/2 | 5 3/4" | 2 9/16" | \$220.00 | \$200.00 | \$190.00 | \$170.00 | \$140.00 |
| 1 1/2" | 3 1/2 | 6 3/8" | 3" | \$250.00 | \$230.00 | \$210.00 | \$200.00 | \$190.00 |
| 2" | 3 1/2 | 7 5/8" | 3 9/16" | \$402.00 | \$390.00 | \$370.00 | \$354.00 | \$339.00 |

ENGINEERING SPECIFICATIONS FOR COIL THREADS

NUTS

| SIZE | MIN. MINOR | MAX. MINOR | MIN. MAJOR | MAX. MAJOR |
|--------------|------------|------------|------------|------------|
| 3/8-7 | 0.322 | 0.327 | 0.375 | 0.380 |
| 1/2-6 | 0.430 | 0.435 | 0.500 | 0.505 |
| 5/8-4 1/2 | 0.545 | 0.555 | 0.625 | 0.630 |
| 3/4-4 1/2 | 0.645 | 0.655 | 0.750 | 0.755 |
| 7/8-4 1/2 | 0.765 | 0.775 | 0.875 | 0.885 |
| 1"-3 1/2 | 0.860 | 0.870 | 1.000 | 1.005 |
| 1 1/4"-3 1/2 | 1.100 | 1.110 | 1.250 | 1.255 |
| 1 1/2"-3 1/2 | 1.350 | 1.360 | 1.500 | 1.505 |
| 2"-3 1/2 | 1.850 | 1.860 | 2.000 | 2.010 |

SCREWS

| SIZE | MIN. MINOR | MAX. MINOR | MIN. MAJOR | MAX. MAJOR |
|--------------|------------|------------|------------|------------|
| 3/8-7 | 0.312 | 0.317 | 0.375 | 0.370 |
| 1/2-6 | 0.415 | 0.425 | 0.485 | 0.495 |
| 5/8-4 1/2 | 0.525 | 0.535 | 0.610 | 0.620 |
| 3/4-4 1/2 | 0.630 | 0.640 | 0.730 | 0.740 |
| 7/8-4 1/2 | 0.750 | 0.760 | 0.855 | 0.865 |
| 1"-3 1/2 | 0.840 | 0.850 | 0.980 | 0.990 |
| 1 1/4"-3 1/2 | 1.080 | 1.090 | 1.230 | 1.240 |
| 1 1/2"-3 1/2 | 1.330 | 1.340 | 1.480 | 1.490 |
| 2"-3 1/2 | 1.830 | 1.840 | 1.980 | 1.990 |

THE THREAD RADIUS IS EQUAL TO 1/4 THE PITCH

